Joint Engineering Team (JET) Meeting Minutes

National Coordination Office for Networking and Information Technology R&D (NCO/NITRD)
490 L'Enfant Plaza SW, Suite 8001, Washington, DC 20024
May 21, 2024, 12:00 – 2:00 p.m. ET
This meeting was held virtually

Participants

Hans Addleman, Indiana University	Ralph McEldowney, DREN
Todd Butler, NASA/EOS	Aruna Muppalla, NASA/GSFC
Dale Carder, ESnet	Michael Sinatra, ESnet
Jonah Keough, Pacific Wave	Nik Sultana, IIT
Michael Lambert, PSC/3ROX/ACCESS	Bobby Thompson, NIH
Paul Love, NCO/NITRD	Kevin Thompson, NSF
Joe Mambretti, StarLight/MREN	

Proceeding: This meeting was chaired by Kevin Thompson (NSF) and Ralph McEldowney (DREN).

I. **Action Items**: (none pending)

II. **Review of the Minutes of the April 2024 meeting:** Corrections were received and are reflected in the final minutes posted on the JET's web page.

II. **The JET as a Community of Practice: Paul Love**
    The migration from a Team of the LSN to a Community-of-Practice was discussed.

III. **Operational Security Round Table**
    A. ESnet (Dale Carder):
        a. ESnet is working on getting RPKI in place. It has done a few manually as an exercise/test. The bulk will be done as soon as the needed automation tools are in place (delivery is expected shortly).
        b. RIPE88 is this week. The Connect WG session will discuss a proposal to only accept Objects in IRRs overseen by the five RIRs. RADb, along with others, would not be considered authoritative.
        Question: What is the timeline?
        Answer: Perhaps a year. There will be a one-year grace period from when an IXP tells its members it has adopted the BCP.
        Additional material:
            The recording of the session can be found at:
                https://ripe88.ripe.net/archives/video/1356/

RIPE has placed this in its BCP track. The draft v1.0 text can be found at:
https://www.ripe.net/ripe/mail/archives/connect-wg/attachments/20240604/350b90b5/attachment-0001.pdf

IV. **Network roundtable**
   A. DREN (Ralph McEldowney): DREN is working with Verizon and Cisco to resolve stability issues on its backbone. These are related to MACsec and IS-IS.
   B. ESnet (Michael Sinatra): The long-awaited migration of ESnet's transit customers to L3VPN is underway. Peering connections will be done next quarter.
   C. International Networking at Indiana University (Hans Alderman):
      a. TransPAC: International Networking at Indiana University (IN@IU) is working to decommission the TransPAC router.
      b. NEA3R is continuing with its trans-Atlantic partners to update backup plans.
   D. Pacific Wave (Jonah Keough):
      a. Planning is starting to support demos at SC in November.
      b. 400G upgrades continue. It's on track to complete as schedule this September.
      c. Pacific Wave is integrating its new hardware into its automation tools.

V. **Exchange Points Round Table**
   A. PNWGP (Jonah Keough): Nothing to report today.
   B. StarLight (Joe Mambretti):
   The slides for this update can be found at:
   https://www.nitrd.gov/coordination-areas/lsn/jet/jet-meetings-2024/
      a. StarLight (SL) is starting its preparations for SC24/SCinet/NRE. There will be a 1.2 Tb ring between SL, SC (Atlanta, GA) and the Joint Big Data Testbed (JBDT) (McLean, VA) where NRL and NASA/GSFC connect. Demonstrations will also make use of the NA-REX's 400G paths, FABRIC, Ciena's network (to Ottawa, Canada), a persistent 400G over ESnet's testbed and a 400G path to the CENIC/Pacific Wave site in Sunnyvale, CA. A second 1.2Tb has been requested between SL and the JBDT. It's hoped that both the 1.2T SL<>JBDT paths will be persistent.
      b. Other resources planned to be used include the Global and National Research Platforms, the extended DMZ SL is working on with Osaka University and SL's SDX.
      c. Where AutoGOLE/SENSE services exist, the demonstrations will make use of them. Likewise, where DTNaaS exists.
      d. SC24, JBDT and SL will each have the gen5 DTNs with SmartNICs. SL has been testing the DTNs and is anticipating that each will be able to drive a 400G stream.
      e. One demonstration with TRIUMF in Canada will be making use of scitags. It will use CANARIE to reach PNWGP and then to SC.
      f. SL is working with ESnet on a demo of gamma ray analytics pipelining capability.
      g. Another demo is of a project lead by ANL, SciStream, which will use processors in the network to do data filtering and analytics. This will prevent moving traffic out

of the network and then back in. Rather the capabilities of in network SmartNICs and FPGAs will be used to do analytics for scientific pipelines.

h. One other possible demo would be an upgrade to the demo done at OFC making use of the Rucio, SDS, and XRootD tools to move data of thousands of kilometers.

Meetings of Interest 2024

Jun 9-10	Northern Tier Network Consortium,	Lincoln, NE
Jun 10-12	Great Plains Network Annual Meeting,	Lincoln, NE
Jun 10-12	NANOG 91,	Kansas City, MO
Jun 11	IT Modernization Summit,	Washington, D.C.
Jun 10-14	TNC24,	Rennes, France
Jun 14	Global Science Network Forum,	Rennes, France
Jul 20-26	IETF 120,	Vancouver, B.C. Canada
Jul 21-27	PEARC24,	Providence, RI
Aug 9	AINTEC 2024,	Sydney, Australia
Aug 26-30	APAN58,	Islamabad, Pakistan
Aug 27-28	DREN TIM,	Albuquerque, NM
Aug 30 – Sep 6	APNIC 58,	Wellington, New Zealand
Sep 16-19	Fifth Global Research Platform Workshop at IEEE eScience,	Osaka, Japan
Sep 17-19	The Quilt Fall Meeting,	Hartford, CT
Oct 9-10	CANARIE Summit,	Ottawa, Canada
Oct 21-23	NANOG 92,	Toronto, ON Canada
Oct 24-25	ARIN 54,	Toronto, ON Canada
Oct 28 – Nov 1	RIPE 89,	Prague, Czech Republic
Nov 2-8	IETF 121,	Dublin, Ireland
Nov 17-22	SC24,	Atlanta, GA
Dec 9-12	Internet2 Technology Exchange,	Boston, MA
Feb 3-5, 2024	NANOG 93,	Atlanta, GA
Feb 3-6, 2024	The Quilt Winter Meeting,	Tempe AZ
Feb 2024	APAN59,	Japan
Mar 15-21, 2024	IETF 122,	Bangkok, Thailand

Next JET meetings
Note: It is anticipated that most JET meetings will remain virtual for the foreseeable future

Jun 18, 2024	12-2 p.m. ET
Jul 16, 2024	12-2 p.m. ET
Aug 20, 2024	12-2 p.m. ET